the chamber during the application of the radiant-heat bath, I provide a curtain I, which is secured to the chamber A at the opening A′, it being understood that this curtain affords ample entrance of air for the purposes of ventilation, and also provides means whereby the head of the person, if desired, may be left outside the chamber while his body remains exposed to the action of the heat therein, as will be understood by reference to Fig. 1. The space between the inner end of the table and the adjacent end wall of the chamber allows a current of fresh air to pass from the opening A^2 upward and over the person lying on the table to the entrance. Thus a good circulation of fresh air is maintained while the treatment is in progress.

The action of my improved radiant-heat bath does not depend upon the heat which is transmitted directly by the air, as is evidenced by the fact that the curtain I need not be closed air-tight and that an ample ventilation may be carried on during the bath, and yet the heat will be sufficient to materially raise the blood heat and external heat of the person and stimulate the cutaneous activity.

I have made a series of exhaustive comparative experiments with my improved bath and Turkish and Russian baths under as nearly as possible the same conditions, and found the following results: The time required to induce perspiration with my improved radiant-heat bath was less than four minutes on an average, and the corresponding temperature of the air in the bath-chamber was about 80° Fahrenheit. In a Turkish bath the temperature required to induce perspiration was nearly 100° Fahrenheit and the time about five minutes and a half. With the Russian bath the temperature was about the same as the Turkish bath, but the time required to induce perspiration was almost seven minutes. I also found that the internal and surface temperature of the person, at the time perspiration began, was about 1° higher when using my apparatus than with a Turkish or Russian bath. As to the elimination of carbonic acid, careful measurements showed that up to five per cent. could be obtained by the use of my apparatus, while with a Turkish bath the highest percentage was 4.07 and with a Russian bath 3.96.

Another effect of my radiant-heat bath is a diminution of the amount of urea, chlorids, and solid matters contained in the urine secreted. With the Turkish and Russian bath the percentage of urea, chlorids, and solids is increased by eight to sixteen per cent. as compared with the figures obtained after the application of the radiant-heat bath. The effect, therefore, is the reverse of that obtained for the elimination of carbonic acid—that is, the radiant-heat bath is much more powerful than either the Turkish or the Russian bath as a means of stimulating the activity of the skin in eliminating carbonic acid.

I desire it to be understood that my invention is not limited to the exact construction shown in the drawings, and that various modifications may be made within the scope of the appended claims.

What I claim, and desire to secure by Letters Patent, is—

1. An apparatus for applying radiant heat for bath purposes, comprising a chamber whose walls are provided with mirrors on its vertical opposite sides and horizontal top, the mirrors being arranged to reflect light toward the center of the chamber, and lamps arranged within the chamber on the walls thereof and inclosing between them a free central space for the reception of the person, or that part of his body which is to be treated, substantially as described.

2. An improved apparatus for applying radiant heat for bath purposes, comprising a chamber having walls provided with reflectors, a series of incandescent electric lamps arranged on said walls and directed toward the center of the chamber, a table in the latter for supporting the body of the patient, a passage or opening at the front end of the chamber that permits entrance of the person, and a ventilating-opening at the rear end and in the floor of said chamber, as shown and described, whereby the fresh air admitted through such floor-opening passes upward and then rearward over the table to the entrance, as specified.

3. An apparatus for applying radiant heat for bath purposes, comprising a chamber having a peripherally-arranged series of lamps and a free central space for the reception of the person, and a sliding table for carrying the person into and out of the chamber, said sliding table being provided with a transparent top and a series of lamps below the same, substantially as described.

4. The herein-described table provided with a transparent top adapted to carry the person, and a series of lamps below the top, substantially as described.

5. The herein-described table provided with a transparent top adapted to carry the person, a series of lamps below the top, and light-directing devices to throw the light of the lamps upward through the transparent top and upon the person, substantially as described.

JOHN HARVEY KELLOGG.

Witnesses:
NEWTON K. SHELDEN,
GEO. W. THOMASON.